National Report Portugal

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1. INTRODUCTION

The ANHER project is set up to develop didactic material for nature and archaeology professionals, so that in the end, they can integrate both domains in their work and both heritages can be better protected.

In order to do so, the state and needs of vocational training (VET) in each participating country was analysed. This national report gathered all publications, good practices and needs of the project target groups in the domain of archaeological and natural heritage in Portugal. It discusses the most pertaining issues in providing vocational training to the archaeological and natural heritage sector. It scrutinizes the current situation in terms of defining the most appealing aspects in both types of heritage in the context, as seen from the national context, of rapid changes across Europe in these domains.

These include, among others:

- Sustainability of archaeological and natural resources and their place and role in environmental policy.
- Integration of archaeological heritage into historical landscape and the built environment.
- A role of archaeological heritage in the process of decision making in the natural heritage sector.
- Place and significance of archaeological and natural heritage in policy planning.

Furthermore, this report identifies the potential for the integration of archaeological and natural heritage in the above mentioned aspects taking into account the specific character of Portugal.

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2. DOMAIN OF ARCHAEOLOGICAL HERITAGE

The domain of archaeological heritage in Portugal was studied by analysing best practices and articles, and by doing questionnaires and interviews with professionals in this domain.

2.1 Analysis of good practices

Two analysed best practices are related to the domain of archaeological heritage. One is 'Applied Geographic Informatics Systems in Archaeology' and the other is 'Introduction to Zooarchaeology: mammal fauna'.

The course 'Applied Geographic Informatics Systems in Archaeology' is given by the University of Porto and contains a subject very relevant and useful in the domain of archaeology (and nature). Not all archaeologists know how to work with GIS tools, and this course provides the knowledge. A certificate is not expensive. This course gives a good example of how another discipline is relevant for archaeologists and how it can be integrated into their work. In this way it gives a good example of how we can integrate nature into the work of archaeologists. The course takes 25 hours in total and is spread out over evenings and Saturday mornings. The participants are evaluated on their participation in the classes. A possible shortcoming can be that all the course is face to face and there is no online content.

The course 'Introduction to Zooarchaeology: mammal fauna' is given by the organisation Terra Firme and is a very practical course about recognizing and handling mammal fauna in archaeological excavations. This course gives an example of one way to integrate natural aspects into archaeological work. The course takes 16 hours and materials are delivered on a CD. By this way participants can study more at home and look up information when needed. There is no evaluation. A shortcoming is that the course was last given in 2010 and all information on internet is not up to date.

2.2 Analysis of relevant publications

Two of the analysed articles are directly related to archaeology. The first article is about the first 10 years of the Professional school of Archaeology in Portugal. It covers the reasons to start a public school in archaeology, the location of the school, the contents of the trainings, and concludes with the aptness of evaluation. This article shows good practice of archaeological training as it tries to fulfil the gaps in the work

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field. It discusses the reasons to establish these courses and how these courses are constructed. Portugal needed qualified archaeological assistants who could help during excavations and laboratory work and this school provides training for them. The school is located in Tongobriga, where a lot of archaeological work is executed and the students see and put directly in practice what they have learned.

The second article is about a course given between 1980 and 1983. This article tells about the movement of 'new archaeology', in which ecology, geology and anthropology are included in archaeology in order for archaeologist to execute their work better. It shows how this course filled in this multi-disciplinary gap in the beginning of the 80's by giving a more integrative view on archaeology. Most of the participants found a job in the field of archaeological heritage after completing the course. Unfortunately there is no information online if the course continued to exist after these three years.

Two other analysed articles are related to geology. The first is a minutes book of an update course for geology teachers, given by the Interdisciplinary Centre for Educational Studies. The course has a combination of theoretical, practical classes and fieldwork. This course shows the value of returning courses to update knowledge, and to view the knowledge in the scope of other disciplines, in this case environmental issues. It looks at the implications of geological knowledge in other disciplines as ecology and economy.

The second article shows the relevance of geology and history in the field of tourism. It shows how important it is for professionals to have an integrated view in the work field. When tourism professionals know about the geology and history of their region, they are better prepared for their work. As the article says, "knowledge of the history and geography of the landscape is essential for the dissemination of our heritage". This is very relevant for this project.

Two other analysed articles are related to general VET in Portugal. The first gives an overview of the current status of VET in Portugal. The purpose of the vocational education and training system is (i) to promote the qualification of individuals by providing them with the skills they need to enter the labour market, (ii) to improve the basic training of the working population in order to pave the way for academic and occupational progress and (iii) to guarantee the recognition of skills acquired through both formal and non-formal channels. It shows the relevance of creating a course integrating work fields and increase the knowledge of working professionals.

The second article shows the effectiveness of the training along three dimensions: employment, job-related skills and productivity. Vocational training may importantly improve the labour market prospects of individuals, providing job-related skills, enhancing productivity and bringing new employment opportunities.

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Conclusion

In the past Portugal has tried to raise up the professional level of archaeologists by offering more courses, focused on the necessities of the work field. Up to today relevant courses are available for archaeologists to integrate other competences in their work. However, the integration of the natural heritage into the archaeological heritage work field is still missing. There are examples though how environment can get integrated into other disciplines as geology and tourism. To include this as well into archaeological education will be a valuable continuation of this trend towards capable and well-informed archaeologists.

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2.3 Analysis of needs of target groups

1.1.1. Online Questionnaires

Introduction of the target group/sample

The questionnaires were send to 10 archaeological organisations, schools and companies. A reminder was send a week after. One interviewee was asked to spread the questionnaire amongst his contacts. In the end unfortunately only 3 professionals responded.

33% of the participants has a bachelor degree, 67% has a master's degree. 67% of the participants work as an archaeologist, 33% works as a public administration worker.

Period of professional experience	Percent of respondents
<5	0%
between 5 and 10	0%
between 10 and 20	33,33%
between 20 and 30	33,33%
more than 30	33,33%
no data	0%

All participants have a higher level of education and have more than 10 years of work experience.

The knowledge of the natural heritage management aspects

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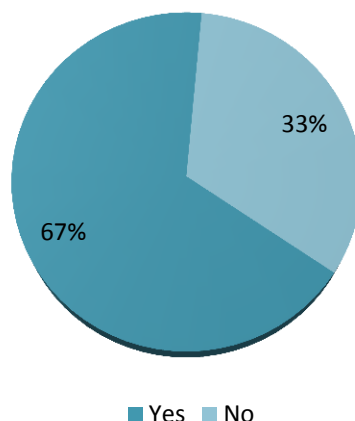
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Figure 1. National legal frameworks for natural protection and conservation

International legal frameworks for natural protection and conservation; The public use of natural space; Ecosystems and biodiversity conservation; Management of natural reserves/parks/spaces;
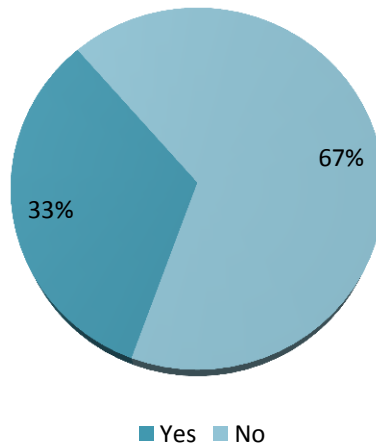

Figure 2. Promotion strategies for natural heritage management

Conclusion: archaeologists in Portugal seem to have a notion of national legal frameworks for natural protection and conservation, but all other aspects of natural heritage management are fairly unknown to them.
- Reminder: Portugal used the system in which 1 is the highest value and 5 the lowest -

Benefits from integral approach to natural and archaeological heritage

Domain	Average mark
Planning strategies	**2**
Sustainable development	**1.33**
Landscape management	**3.67**
Tourism	**4.33**
Wellbeing and quality of life of local groups	**3**

Conclusion: The domain that could benefit the most following our participants is sustainable development, followed by planning strategies. Tourism is considered least important.

Improving competence and performance by enhancing knowledge of natural heritage management

Competences and performance	Average mark
Better understanding of the complex nature of landscape, in particular natural and environmental context of human actions	**3**
More integrated and efficient landscape protection	**1.33**
More adequate management strategies	**3.67**
Application of more efficient mitigation strategies to deal with emerging challenges	**4**
Better communication and social awareness	**3**

Conclusion: A more integrated and efficient landscape protection is considered to be the most improved competence, the application of more efficient mitigation strategies the last important.

Improving landscape protection by the adaptation of an integral approach to natural and archaeological heritage

Improving landscape protection by	Average mark

More efficient integration of landscape into regional and town planning	3
More efficient integration of landscape with cultural, environmental, agricultural, social and economic policies	2.33
Establishing and implementing legal measures aimed at efficient landscape protection	3.33
Increasing awareness of value and importance of landscape to the public	1.33
Triggering training and educational initiatives in landscape for general public	3.67

Conclusion: Following our participants, landscape protection can be most improved by increasing awareness, and the least by triggering training and educational initiatives.

Improving landscape management by the adaptation of an integral approach to natural and archaeological heritage

Improving landscape management by	Average mark
Facilitate better protection of landscape	3
More effective and efficient use of available resources	1.67
More efficient strategies of planning at the regional level	3.33
More effective and accurate reaction to the needs of sustainable development	2.67
Better serving the needs of local groups	2

Conclusion: Following our participants, landscape management can be the most improved by more effective and efficient use of available resources, and the least by more efficient strategies of planning at regional level.

Improving landscape planning by the adaptation of an integral approach to natural and archaeological heritage

Improving landscape planning by	Average mark
Better definition of different components of landscape and their hierarchy	**3.67**
Better definition of the peculiar character of a region	**1.67**
More efficient integration of natural and archaeological/cultural heritage into planning strategies	**2**
More explicitly address concerns of different facets of landscape management in implementing planning strategies at different administrative levels	**3.67**
Better serving the needs of local groups	**1.33**

Conclusion: Following our participants, landscape planning can be the most improved by better serving of the needs of local groups, and the least by better definition of different components of landscape and their hierarchy and more explicitly address concerns of different facets of landscape management in implementing planning strategies at different administrative levels.

Value of different elements of the training process

Element	Average mark
Flexibility of the course	**1**
Contact with the tutor	**3.67**
Assignments	**2.67**
Cost	**2.33**
Obtaining a certificate	**3.33**

Conclusion

Our participants find flexibility of the course the most important, followed by the costs. The contact with the tutor is considered least important.

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1.1.2. Interviews

Introduction of the target group/sample

We have reached the archaeologists of Portugal through LinkedIn. The interviews were done by phone. After the interview, we asked for more contacts to carry out more interviews. This lead to two extra interviews.

In total, seven interviews with archaeological professionals were carries out. 57% of the interviewees has a master's degree, 29% has a bachelor degree, and 14% has done a professional course. 14% works in a municipality and 86% in archaeological and building companies.

Period of professional experience (years)	Percent of interviewees
<5	0%
between 5 and 10	14%
between 10 and 20	57%
between 20 and 30	29%
more than 30	0%
no data	0%

Most interviewees have had high education and work mostly in archaeological companies. Most participants have 10-30 years of work experience.

Integration of natural and cultural heritage management in their work and specific actions

All the archaeologists indicate that natural heritage management is integrated in their work to some extent. 66% of the interviewed archaeologists work in a team in which they have colleagues specialised in nature to ask for help when needed. 14% of the interviewed archaeologists working in the municipality indicate it is difficult because the municipality works with the heritages separately in the land use planning. 86% indicate that they worked on projects in which both heritages are integrated. 14% works in an ecological reserve and have the ecological factor always integrated in their work.

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Knowledge of the ecosystems and biodiversity in their area and the strategies to protect, manage, value and promote them

100% of the interviewed archaeological professionals indicate that they are aware of the natural heritage and the strategies to preserve it. 14% has an intention of studying biology to be more competent.

Skills to ensure natural protection and conservation and methods used for it

100% indicate that even though they are aware, they don't have the necessary skills. 14% indicate that they always take care.

Collaboration and support from natural heritage professionals

43% gets support from an nature expert in their own team, 57% has to get external support from other companies or NGO's.

Involvement in landscape management and planning and suggestions for a jointly approach of both domains

86% of the interviewed professionals indicate they are involved in landscape management and planning, 14% indicate they are not involved. 14% indicate that the natural heritage is integrated with great difficulty. 66% indicate that the natural heritage is always involved and integrated in their projects, but that another person in the team is responsible for that part. Most of them indicate that it is essential to integrate both domains for good conservation and preservation.

Suggestions given for a jointly approach is firstly to have good practices in both domains. 28% tell that their companies always do an environmental study before excavations and then take decisions according to the law.

Competences and performance enhanced by developing knowledge of natural heritage management and necessary skills to do that

71% of the interviewees indicate that they would feel much more able to do their job if they knew more about the natural heritage, mainly because they work

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independently. 29% indicate that they would be more able, but this is not essential to do their job because they work in a team.

Skills they would like to learn are legislation (50%), flora and fauna (33%), geology (33%) and environmental education to combine both heritages (17%). 66% indicates they want to learn everything in general they need to know about environmental issues to execute their work better.

Interest in training regarding cultural and natural heritage management

None of the interviewees has had any training related to the natural heritage. 17% has a master's degree in that involves geomorphology. GIS, ecosystems, sediment analysis and landscape analysis. They all show interest to follow such a training, and 17% say this integration of both heritage management is very relevant as it changes the current model of approaching the heritages. 17% indicate that some subjects need practical classes rather than just online classes. All of them like to stay updated about this project.

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3. DOMAIN OF NATURAL HERITAGE

The domain of natural heritage in Portugal was studied by analysing best practices and articles, and by doing questionnaires and interviews with professionals in this domain.

3.1 Analysis of good practices

The first best practice is a formative course about the Natura 2000 network in Portugal, given by LPN, a Portuguese nature association. It teaches the concepts of Natura 2000, but also teaches the participants how to identify vegetation associations, and gives a case study to show the relevance of the studied concepts. A strong side of this training is thus that it is complete, using geography and climatology to explain the occurrence of vegetation types. The training is certified. A shortcoming is that it is a very short course (15 hours) and there are no other materials than the PowerPoint presentations.

The second best practice is a course about management of quality and natural systems, with a duration of a full year. The participant follows courses such as nature management and environmental technology. After the course, the participant can work as a technical assistant in companies, monitoring the environmental impact of products or services. This is relevant for this project, because the environmental impact of archaeological excavations is one of the integrative concepts we can treat in this project. This course includes examination and a certificate.

The third best practice is an e-learning course about Eco product management, given by Institute of Employment and Vocational Training. This course helps companies and boards to integrate environmental management in their products and services. It is another good example of how nature can be integrated in other disciplines. A strong point is that all materials are freely accessible through the website, which can be a good reference for people who did the course. There is however no evaluation or certificate.

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3.2   Analysis of relevant publications

Four articles about natural education were analysed. The first article shows the needs of training in the natural sector in Portugal and gives suggestions for improvement. The mentioned suggestions are: reinforce the practical component in higher education; increase the quality of the trainers; increase the focus on environmental education; reduce and rationalize the course offers in higher education; create more technological courses and approximate the academic reality to the reality of the work field.

The other articles are manuals of (e-learning) courses. The first manual shows how nature legislation and nature management systems are taught in an e-learning course. It involves the practical sides of theoretical legislation and management systems. The second manual is part of a course which integrates nature into company management and can function as an example to integrate nature into another field, in our case archaeology. It teaches about the different kinds of waste produced by companies and how they can set up a waste management plan to protect the environment. The third manual gives a good example of a well thought through course for young adults. It puts environmental education into the framework of nature conservation and teaches students valuable competences such as techniques in environmental education.

<u>Conclusion</u>

There are many courses in Portugal that address natural heritage or that integrate the natural heritage in other disciplines, but there are hardly any courses where other disciplines get integrated in the natural heritage. A missing part of VET in Portugal is the knowledge of historical landscape and historical human influence in the management of the current natural heritage. One of the advices in an article is to approximate the academic reality to the reality of the work field. This is exactly what this project tries to achieve.

3.3   Analysis of needs of target groups

3.3.1. Online Questionnaires

Introduction of the target group/sample

The questionnaire was send to 12 organisations and companies with a request to spread it between their employees. 8 interviewees were asked to spread the questionnaire between their contacts. 25 professionals in the natural heritage answered the questionnaire.

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4% of the respondents completed secondary education, 64% has a bachelor degree and 32% has a master's degree. 52% works as a biologist, 24% as a teacher, 12% as public administration worker, 4% as a forester and 8% unknown.

Period of professional experience	Percent of respondents
<5	0%
between 5 and 10	4%
between 10 and 20	48%
between 20 and 30	36%
more than 30	8%
no data	4%

Conclusion

Most participants have a degree at university level and have between 10 and 30 years of working experience.

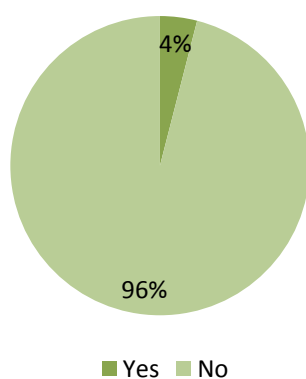**The knowledge of the archaeological heritage management aspects**

4%

96%

■ Yes ■ No

Figure 3. National legal frameworks for archaeological protection and conservation
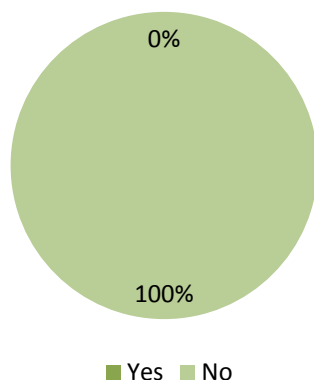
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Figure 4. International legal frameworks for archaeological protection and conservation

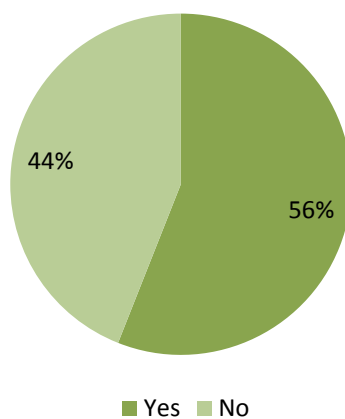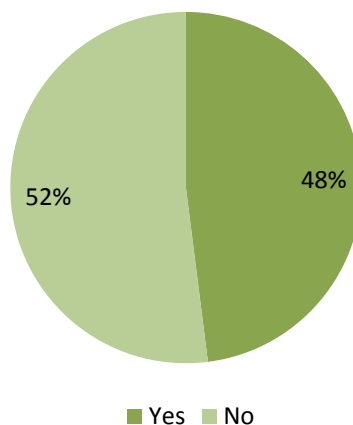**Figure 5. The concept of cultural heritage**

Figure 6. Significance and role of archaeological heritage management

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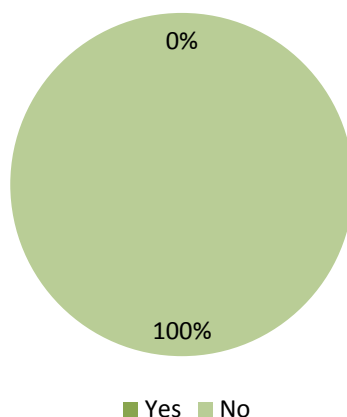
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Figure 7. Promotion strategies for archaeological heritage management

Conclusion: Hardly any professional in natural heritage knows about national legal frameworks. The concept of cultural landscape is known to more than half of the participants. The significance and role of archaeological heritage management is known to less than half of the participants. None of the participants knows about international legal frameworks and the promotion strategies.

<u>- Reminder: Portugal used the system in which 1 is the highest value and 5 the lowest -</u>

Benefits from integral approach to natural and archaeological heritage

Domain	Average mark
Planning strategies	**2.72**
Sustainable development	**2.28**
Landscape management	**3**
Tourism	**3**
Wellbeing and quality of life of local groups	**2.64**

Conclusion: sustainable development is considered the main benefit of an integral approach, followed by wellbeing and quality of life of local groups. Landscape management and tourism are considered the least important benefits.

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Improving competence and performance by enhancing knowledge of archaeological heritage management

Competences and performance	Average mark
Better understanding of the complex nature of landscape, in particular natural and environmental context of human actions	2.8
More integrated and efficient landscape protection	3.04
More adequate management strategies	2.5
Application of more efficient mitigation strategies to deal with emerging challenges	3
Better communication and social awareness	2.68

Conclusion: it is believed that more adequate management strategies followed by better communication and social awareness are the main competences that will be improved. More integrated and efficient landscape protection is considered the least improved competence.

Improving landscape protection by the adaptation of an integral approach to natural and archaeological heritage

Improving landscape protection by	Average mark
More efficient integration of landscape into regional and town planning	2.32
More efficient integration of landscape with cultural, environmental, agricultural, social and economic policies	2.28
Establishing and implementing legal measures aimed at efficient landscape protection	2.8
Increasing awareness of value and importance of landscape to the public	2.92
Triggering training and educational initiatives in landscape for general public	3

Conclusion

Improving landscape protection is believed to be reached by more efficient

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integration of landscape with policies and into planning. Triggering training and educational initiatives is considered the least effective.

Improving landscape management by the adaptation of an integral approach to natural and archaeological heritage

Improving landscape management by	Average mark
Facilitate better protection of landscape	2.8
More effective and efficient use of available resources	2.04
More efficient strategies of planning at the regional level	2.67
More effective and accurate reaction to the needs of sustainable development	2.68
Better serving the needs of local groups	2.96

Conclusion

   Improving landscape management is considered done the best by more effective and efficient use of available resources. Better serving of the needs of local groups is considered the least effective.

Improving landscape planning by the adaptation of an integral approach to natural and archaeological heritage

Improving landscape planning by	Average mark
Better definition of different components of landscape and their hierarchy	3.04
Better definition of the peculiar character of a region	3.12
More efficient integration of natural and archaeological/cultural heritage into planning strategies	2.4
More explicitly address concerns of different facets of landscape management in implementing planning strategies at different administrative levels	2.68
Better serving the needs of local groups	2.88

Conclusion: Improving landscape planning is considered done the best by more efficient integration of natural and cultural heritage into planning strategies. Better definition of the peculiar character of a region is considered the least important.

Value of different elements of the training process

Element	Average mark
Flexibility of the course	**2.4**
Contact with the tutor	**2.92**
Assignments	**2.72**
Cost	**2.76**
Obtaining a certificate	**3.24**

Conclusion

The flexibility of the course is considered the most important for the participants. Obtaining a certificate is considered the least important.

1.1.3. Interviews

Introduction of the target group/sample

10 interviews with natural heritage professionals were carried out. The interviews were done by phone. 50% of the interviewees has a bachelor degree and 50% has a master's degree. 40% works in an NGO, 50% works as an environmental technician, and 10% as a coordinator.

Period of professional experience (years)	Percent of interviewees
<5	0%
between 5 and 10	20%
between 10 and 20	60%
between 20 and 30	20%

more than 30	0%
no data	0%

All participants have a degree at university level and they have a work experience between 5 and 30 years.

Integration of natural and cultural heritage management in their work and specific actions

Most interviewees (90%) have project management and coordination as a major part of their daily job. 60% indicate that the both heritages are always integrated when needed. 20% say that they have projects where both heritages are present only once in a while, 20% never has specific projects with both heritages and 10% indicates that normally the heritages are not integrated in their work.

Knowledge of the archaeological heritage in their area and the strategies to protect, manage, value and promote it

60% are aware of and interested in the archaeological heritage. 20% indicate that they are aware, but not enough. 20% indicate that they are not aware.

Skills to ensure archaeological protection and conservation and methods used for it

100% indicate that they don't have the necessary skills to ensure archaeological protection and conservation. 10% indicate they know just enough to make dissemination of areas in region.

Collaboration and support from cultural heritage professionals

100% indicate they look for external support when necessary. 80% finds this support outside their team, and 20% within their team. 10% indicate that it is difficult to get external support when they are not part of the project.

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Involvement in landscape management and planning and suggestions for a jointly approach of both domains

All participants (100%) indicate that they are involved in landscape management and planning. 30% of them indicate that usually there is no integration, 40% indicates that there is only sometimes an integration, when there is the need. 10% indicates that integration takes only place when it's part of the project, otherwise they send the information to the local authority.

60% indicates that it is needed to integrate both heritages to make the public aware of both.

Competences and performance enhanced by developing knowledge of cultural heritage management and necessary skills to do that

None of the interviewed professionals has any course on archaeological heritage. They would like to learn different concepts: 60% would like to know more about the local and regional archaeological areas and records, e.g. the Islamic culture and history in the Algarve. 20% would like to know more about how ancient civilizations attitude towards the environment was, how did they preserve the environment? 20% would like to know more about general concepts, like Roman time, Middle Ages. 10% would like to know more about signs that indicate there is heritage to preserve, environmental components within archaeological records, legislation and aquatic archaeology.

80% would feel more qualified if they knew more about archaeological heritage. They would be more sensitive and have more information, which would make their work more valued and enriched. 20% indicate that their competence would be insignificantly improved, either because they work in a larger team or they don't have projects that could integrate the two heritages.

Interest in training regarding cultural and natural heritage management

All interviewees would have an interest in following such a training, 10% only if it related to regional archaeology. 90% of the interviewees likes to stay updated about this project.

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2. CONCLUSION

In the current situation VET plays an important role for professionals in Portugal in order to find a job. There is however still the need to approximate the academic reality to the reality of the work field. There are several VET courses available about either archaeology or nature. A course that integrates both domains is however not yet available. There is nevertheless much interest for such a training. Professionals in both archaeological heritage and natural heritage are aware about the other domain, but feel that their competences to execute their work will increase if they would know more about the other domain.

Noticeable is that for archaeology relevant courses are available for archaeologists to integrate other competences in their work, but this is not the case for nature professionals. The natural heritage gets integrated in other disciplines, but there are hardly any courses where other disciplines get integrated in the natural heritage. Nature professionals are aware of the cultural heritage in the landscape, but they don't feel qualified enough to protect it.

Most people we interviewed, either archaeological or natural professional, are involved in projects with landscape management and planning. Archaeologists work mostly in a team with access to nature professional. Professionals in nature however need to involve external support when they work on projects in which both domains are integrated. Archaeologists are not much aware of the different aspects of natural heritage management, except for the national legal frameworks. Most of the nature professionals are aware of the significance and role of archaeological heritage management, but less to other aspects of archaeological heritage management.

In conclusion, the integration of the natural heritage into the archaeological heritage work field is still missing in Portugal. Another missing part is the knowledge of historical landscape and historical human influence in the management of the current natural heritage.

What are the consequences of an integral approach for the competences of the professionals and for the landscape? Archaeologists feel that their competences will get improved leading to a more integrated and effective landscape protection. Natural professionals feel that their competences will get improved leading to more adequate management strategies and better communication and social awareness.
Archaeologists suggest that the benefits of an integral approach of both domains are sustainable development and planning strategies. Natural professionals suggest that the benefits of an integral approach of both domains are sustainable development and wellbeing and quality of life of local groups. Sustainable development is mentioned by professionals in both domains as the most important benefit and is therefore worth exploring in our project.

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Archaeologists feel that landscape protection is to be improved by increasing awareness of value and importance of landscape to the public. Natural professionals feel that landscape protection is considered to be improved by more efficient integration of landscape with cultural, environmental, agricultural, social and economic policies and within regional and town planning. Awareness, policies and planning are therefore important keywords when we consider landscape protection.

Both archaeologists and nature professionals feel that landscape management will be improved by more effective and efficient use of the available resources.

Archaeologists feel that landscape planning can be improved by a better definition of the peculiar character of a region. Nature professionals feel that landscape planning should be improved by an effective integration of natural and cultural heritage into planning strategies. Definition and integration are the keywords to keep in mind when we consider landscape planning.

Suggestions given by archaeologists to an integral approach are to have good practices in both domains and to do an environmental survey before excavations are executed. Nature professionals indicate that the integration of both domains will be very good to make the public aware of both.

What are the recommendations for our project? Archaeologists would like to know more about legislation, flora, fauna and geology and general knowledge about environmental issues that would help them in their work. An important aspect is how to take nature into account with excavations. Natural professionals are mostly interested in local and regional archaeological records, the ancient attitude towards environment, general concepts, signs that indicate that there is heritage to preserve and legislation. An important aspect for them is how to implement both heritages in policies and planning. They want more knowledge of regional heritage.

During this time of collecting data, we found proposals for improvement for VET courses in the domains of archaeology and nature. Integrating different disciplines is very relevant in the current VET plans for improvement in Portugal. In articles about VET in Portugal it is indicated that a combination of practical and theoretical work is preferred when setting up a course. The flexibility of the course is the most important to all the participants, followed by assignments and costs. A certificate and contact with a tutor is considered least important for an e-learning course.

All with all, our project will be a valuable contribution to the VET offer in Portugal for professionals in archaeology and nature. It can fulfil the gap that currently exists in the VET and it can show the value of integrating two domains in order to have capable and adequate professionals in the work field.

Annex I: Publications
Annex II: Best practices
Annex III: Interviews